

AUSTRAL HEPATICAE XI.

LOPHOCOLEACEAE: NEW TAXA, NEW COMBINATIONS AND REALIGNMENTS*

John J. Engel

Donald Richards Associate Curator of Bryology, Department of Botany, Field Museum of Natural History, Roosevelt Road at Lake Shore Drive, Chicago, Illinois 60605.

NEW TAXA AND NEW COMBINATIONS IN CLASMATOCOLEA

The following new taxa and new combinations were part of a monographic study of Clasmatocolea; the names are published separately to make them immediately available for use.

1. Clasmatocolea humilis var. polymorpha Engel, var. nov.
~~~~~

Amphigastria caulina polymorpha, apices saepe late rotundati ad truncatos ad retusos, tantum disperse breves atque bifidi; amphigastria caulina uniformiter parva magnitudine plantae, illa in distale parte axis (0.8-)1-1.3X caulis latitudine.

Holotype: Tristan da Cunha, above settlement, 620 m., 21 December 1938 Christophersen & Mejland 52 (O!, isotype - S!).

Underleaves polymorphic in shape, the apices often broadly rounded to truncate to retuse, only sporadically short bifid; underleaves uniformly small for plant size, those in distal portion of axis (0.8-)1-1.3X stem width.

2. Clasmatocolea humilis var. suspecta (Mass.) Engel, comb. nov.  
~~~~~

Basionym: Lophocolea puccioana var. β suspecta Mass. Nuovo Giorn. Bot. Ital. I. 17: 228. 1885.

3. Clasmatocolea minutiretis Engel & Grolle, sp. nov.
~~~~~

Clasmatocoleae humili (Hook. f. & Tayl.) Grolle similis, sed differt 1) amphigastriis deminutis, inconspicuis, 0.35-0.6X caulis latitudine, bifidis ad 0.55-0.7; 2) ramis terminalibus absentibus; 3) oppositis masculis

---

\* I would like to thank Dr. William Beatty for assistance with the Latin diagnoses, and Ann Hollmann for typing the manuscript.

bracteis coalescentibus versus basem; 4) seta 7-8 cellularum diametro, 19-20 epidermalium serierum; 5) strato parietis externa capsulae cum semianularibus incrassatis vittis.

Holotype: Chile, Prov. Magallanes, E. shore of Isla Pilot, Engel 4785 (MSC!).

Plants brown to pale reddish-brown, the stems a rich red-brown. Branches abundant, the ventral-intercalary type very common, lateral-intercalary occasional, terminal branches absent. Leaves strongly erect, deeply conchiform concave, the ventral-basal portion appearing billowed out and extending ventrally well beyond stem surface; leaves undivided, the apex and ventral margin with several irregularly sized and spaced, often incurved teeth, the dorsal margin entire. Leaf cells somewhat thick-walled, trigones large to knot-like; cuticle smooth. Underleaves reduced, 0.35-0.6X stem width, narrowly lanceolate to narrowly long triangular, bifid to 0.55-0.7, the segments cilia-like.

Plants dioecious; bracts obliterating or nearly so the view of dorsal stem surface, the bracts with saccate portion fused toward base with opposite bract. Perianth strongly trigonous, the lobes coarsely armed with sharp or rounded teeth. Seta 7-8 cells in diameter, with 19-20 rows of outer cells. Capsule wall 3-5 layers thick, the outer layer with red-brown, nodule-like or weakly spine-like thickenings and a few semiannular bands; inner layer with semiannular bands common.

#### 4. *Clasmatocolea moniliformis* Engel, sp. nov.

Plantae rigidae, aureo-brunneae, moniliformes; axes 315-420  $\mu$  latitudine. Folia ventralibus cum extremitatibus inserta in caule base amphigastrii vel basalibus cellulis amphigastrii laminae. Folia erecta, subsquarrosa, apice indivisa, oblique truncata, lateribus + parallelis; marginibus et apice integris, margine ventrale subauriculato base. Cellulae foliorum parietibus crassis, trigonis magnis, saepe protuberantibus, cuticula leve. Amphigastria 4.6-6.7X caulis latitudine, cum parte apicale appressa ad caulem, cucullata, inflata, caulem amplexente; apicalibus indivisis, late rotundatis vel truncatis, integris; laminarum marginibus integris.

Holotype: Chile, Prov. Magallanes, E. side of Bahía Borja, Engel 6159 (MSC!).

Plants rigid, golden brown, moniliform; axes 315-420  $\mu$  wide. Leaves with ventral end inserted on stem at immediate base of underleaf or on basal few cells of underleaf lamina. Leaves erect, subsquarrose, the apex undivided, obliquely truncate, the sides + parallel; margins and apex entire, the ventral margin subauriculate at base. Leaf cells thick-walled, trigones large, often bulging; cuticle smooth. Underleaves 4.6-6.7X stem width, with apical portion appressed to stem, cucullate, inflated, clasping the stem; apices undivided, broadly rounded or truncate, entire; leaf margins entire.

5. Clasmatocolea navistipula var. parceramosa Engel, var. nov.

~~~~~  
 Ramificatio parce adest, rami terminalibus lateralibus interdum;
 amphigastria caulina ad 1.7X caulis latitudine.

Holotype: Chile, Prov. Magallanes, Brunswick Peninsula, ridge between Bahía Bougainville and Bahía San Nicolas, 9 October 1969, Engel 6425 (MSC!).

Branching sparingly developed, terminal lateral branches occasional; underleaves to 1.7X stem width.

6. Clasmatocolea obvoluta var. cookiana (Mass.) Engel, comb. nov.

~~~~~  
 Basionym: Lophocolea cookiana Mass. Nuovo Giorn. Bot. Ital. I. 17: 224. pl. 16, f. 11. 1885.

MISCELLANEOUS INFORMATION ON THE GENUS LOPHOCOLEA1. The names Lophocolea austrigena and L. cavispina.

Fulford (1976) treated Lophocolea austrigena (Hook. f. & Tayl.) G. L. & N. as a synonym of Lophocolea cavispina, a species which she transferred from Jungermannia. Both these taxa were described as new in Hooker and Taylor (1844), the former from Isla Hermite (Chile, Prov. Magallanes), and the latter from the Falkland Islands. According to Article 57 (International Code of Botanical Nomenclature, 1972), "The author who first unites taxa bearing names or epithets of the same date has the right to choose one of them, and his choice must be followed." Stephani (1906, p. 56), in his Species Hepaticarum, was the first to unite these species; he used the name Lophocolea austrigena for the combined taxon. Lophocolea austrigena is therefore the correct name.

2. Lophocolea textiloidea Engel, nom. nov.

~~~~~  
Chiloscyphus lucidus Mitt. J. Linn. Soc., Bot. 15: 64. 1877 non C. lucidus (Lehm. & Lindenb.) Nees in G. L. & N., Syn. Hep. 182. 1845. Chiloscyphus granditextus Steph. Bull. Herb. Boissier 8: 49. 1907 (= Spec. Hep. 3: 225). [Non Lophocolea granditexta Steph. Bull. Herb. Boissier 6: 881. 1906 (= Spec. Hep. 3: 106)]. Type: Tristan da Cunha, Moseley (NY!).

Literature Cited

Fulford, M. 1976. Manual of the leafy Hepaticae of Latin America. Part IV. Mem. New York Bot. Gard. 11: 393-535, pl. 108-159.

Hooker, J. D., and T. Taylor. 1844. Hepaticae antarcticae; being characters and brief descriptions of the Hepaticae discovered in the southern circumpolar regions during the voyage of H. M. Discovery Ships Erebus and Terror. London J. Bot. 3: 366-400, 454-481, 556-582.

Stephani, F. 1898-1924. Species Hepaticarum. Genève & Bale, 6 vols.